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(54) Title: **METHOD FOR CONVECTION ENHANCED DELIVERY OF THERAPEUTIC AGENTS**

(57) Abstract: A method for monitoring and controlling convection enhanced delivery of a therapeutic agent to a target tissue is disclosed. A tracer that is detectable, for example, by magnetic resonance imaging (MRI) and/or by X-ray computed tomography (CT) is co-infused with the therapeutic agent and used to monitor the distribution of the therapeutic agent as it moves through the target tissue. The images obtained during delivery are used to confirm delivery of the therapeutic agent to the target tissue and to avoid exposure of tissue outside of the targeted area to the therapeutic agent. In addition, the signal intensity of the images may be used to confirm that the therapeutic agent has been delivered to the target tissue at a desired concentration.

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INTERNATIONAL SEARCH REPORT

International application No.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61B 5/055

US CL : 424/9.3

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 424/9.3

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
noneElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EAST; Dialog

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-----------------------|
| Y | LONSER, R.R. et al. Direct convective delivery of macromolecules to the spinal cord. J. Neurosurg. October, 1998. Vol. 89, pages 616-622, see entire document. | 1-36 |

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

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